

## CLASSIC COMPUTERS

Although Atarians may not be too happy about it, COMPUTER SHOPPER has classified the 8-bit machines as "Classic Computers."

According to the CS definition, classic computers "are no longer the prime members in their computer line. What makes them classic is the number of users they retain in spite of their age. Classic computer users do not give up their older and faithful machines for a new pretty keyboard and screen..." The only consolation is that COMPUTER SHOPPER also placed Commodore in the same category... W.A.C.O. has finally been listed in CS's user group directory.

## FRUSTRATED AND GONE

Walt Wilson, the new Atari marketing boss who said at the Michigan show that Atari had been "shooting itself in the foot," didn't stick around til the smoke cleared.

When a dealer called up to talk to him, a distraught Wilson commented, "You don't realize how frustrating it is to work for Jack Tramiel." The next time the dealer called him, Walt was no longer at Atari. For those Atari users who dream of someday working for Atari, other Atari employees have confirmed that it isn't easy to work for Uncle Jack. **STICKER SHOCK OF MEGAS**

The biggest howl among Atari dealers and consumers alike is that the megas are overpriced and thus will do poorly against the competition. The term "mega" really means "megabucks" price tag. For years the Atari community has been accustomed to "power without the price" and big discounts due to dealer competition. "I don't serve dealers. I serve end users," Jack once said. Now Atari is trying to reverse that image in order to make ST computers profitable for the prestigious computer stores to stock them. That may be sound business on one hand, but that means turning traitor on the installed user base and especially the user groups who

have been forced to buy via mail order because of the lack of Atari dealers in their areas. When we pointed this out to Neil Harris, he retorted that the mail order dealers were the reason for the lack of local dealers (an over simplification of the problem, we believe- editor) but admitted that Atari would have to establish dealers in areas where they don't now exist. (Atari has threatened both distributors and dealers with loss of their dealership if they sell 1040's or megas via mail order.) Thus, the prices of ST's have gone up instead of down, much to the ire of 8-bit owners who have been waiting til the ST's drop low enough to fit their budgets. Dealers are now charging list prices for systems as Atari attempts to fix prices at list.

In defense of Atari, we should note that one meg chips have jumped back up in price after dropping as low as \$17 so that upgrading a current ST to two or four meg is very costly. Don't expect to see the new TOS ROMS and Blitter chip upgrades for the old machines til mid 1988. Atari wants you to buy a mega instead of upgrading. If you add together the price you originally paid for an ST and the prices for memory upgrades and ROMS and Blitter, the mega doesn't seem so far out in left field. The problem is that the only people who respect the Atari name are those who cannot afford \$2500 computers, but the Atari corporate mentality doesn't seem to understand that.

Meanwhile, the lack of availability of Atari products (There are only two ST dealers in the Pittsburgh area and none in Westmoreland County) and the elimination of discount prices with an Xmas season coming up may create the same situation as four years ago when Warner Atari didn't have the 800XL's on dealer shelves in time for Christmas and Commodore bounded ahead in sales to stay. The credibility of mail order dealers has been damaged because (since there is a three month



# THE PRESIDENT'S PAGE

AtariFest Show '87



Hi there. This month I have a guest columnist. Our secretary, Debbie Davis, went with our group to the AtariFest in Washington, D.C. on Saturday, October 24. Here are her comments.

George & Jimmy Adamson, Al Stanaszek, Keith Krause, Kevin Brady, and I

We left the Adamson home at 2:15-2:30 a.m. and arrived in Fairfax, Va. at 7:30 a.m. It took us 5 1/2 hours to arrive. The AtariFest Show was held in the Fairfax High School. We grossed \$212.50, George purchased 3 boxes of ST disks, I also purchased 2 boxes of floppies which totaled \$49.00, so it leaves a total of \$163.50. We sold W.A.C.O newsletters 8-bit software, 16-bit software (ST Writer, 8-bit emulator: Basic and Binary). Keith Krause went around after the show was over at 5:00 p.m. to collect donations for our Christmas party on December 8th from clubs that attended the show. Other than troubles with the 3 drives for the 8-bit computer everything turned out great from my point of view. We also have 2 families that would like to have listings of our 8-bit software and 8-bit software mailed to them. For you 16-bit users, don't get all worked up, there were some people who would like 16-bit software and listings mailed to them, too. We just might have new members joining from overseas.

Now for the unexpected. On our way home in the W.A.C.O. Van we started to run into some problems. George was tired so he let our 16-BIT JINX, Albert Stanaszek, drive so he could get some rest. Not 1/2 hour on the road, we have a blow-out on Interstate 70. George drove again for awhile, then back to Al. We then ran into heavy winds and rain and were swaying on the Interstate (not Al's fault), but Al, dear Al, got all 6 of us back in one piece. We arrived at the Adamson home at 11:30-11:45p.m. Saturday night.

Sincerely Yours,

Debora L. Davis (Secretary, WACO)

Thank you, Debbie, for your report. I notice that ATARI has some new and not so new products available in time or almost in time for Christmas. The 7800

is attempting a comeback but a fantastic new concept is vying for the game market. This is the "XE Video Game Machine". It comes with three game cartridges and a pistol. It has a full keyboard, 64K RAM and an OS similar to the XL/XE. And it can be "connected to a disk drive for more sophisticated disk based game programs." (Roughly quoted from the blurb on the box.) A rose by any other name. . . . . Soon to be available is ATARI's 1200 baud modem. I'm thinking of getting one.

Advertised in magazines is the new XF551 double sided/true double density disk drive for the 8-bit machines. Rumor has it that ATARI's DOS is not yet available (is the drive itself available?) ICD's SpartaDos will probably be a better bet anyway, and will work with just about any drive configuration including hard drives.

Speaking of which, as many already know, I have long been an advocate of SpartaDos. Next month's column will review some of the terrific features of the SpartaDos Construction Set that I have been using for the past several years.

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230 Clairmont St.  
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Ad Rates: \$20/page, \$12/half page, \$7/quarter page

WACO is an independent, non-profit Atari user group founded in 1983.

## PROGRAMMING TIPS AND TRICKS

by

Earl Hill

Up to now, I've been taking it easy on all you beginners to ATARI Basic. But that's all over. This month you're really going to sweat! I hope you've brought your thinking caps along! JUST KIDDING! But this month we will move into some more advanced aspects of using ATARI Basic and touch on some things we haven't mentioned at all up to now. This month we have a program to analyze which has all sorts of goodies in it. It is a stand-alone and a quite useful program.

The program is called DATAPAK, and is from a book titled "Atari Basic - Faster & Better" by Carl Evans, IJG Publishing Co. A very good book - I'd highly recommend it. Due to its length, we won't be able to analyze every line in order to fit into our monthly space. However, if you've been with me up to now, a lot of the things will not be a mystery to you.

One of the new techniques this program uses to full advantage is the "Dynamic Keyboard Technique". This technique of controlled screen editing from within a running program relies on two POKES to address 842. It is so handy that I think I'll devote all of next month's column to it, with more details.

The idea behind this program is to take those long DATA statements with numbers and convert them into a graphics character string. In this string, all the characters stand for a number. Why use them? There are some tremendous advantages to this technique, that's why! However, first of all, the code must be relocatable. That means the original machine language must not have had any special types of commands requiring fixed memory locations and a few other things. What putting relocatable USR code into a string allows us to do is to no longer worry about where the routine is stored. The starting address of the routine can be easily found by using the ADR command in BASIC. Second, there is no long reading in of a bunch of numbers from DATA statements during the initialization of a program. Third, the string assignment takes up a lot less room than the numbers - one GRAPHICS character can be three numbers! Fourth, the string packed routine can be stored in an ordinary BASIC disk file, which may contain a whole library of routines, for faster and more convenient loading from basic. Fifth, a string can be stored on disk as a single filename, and recalled from the disk when or as needed.

The DATAPAK program handles this conversion both for DATA statements and Object (Machine Language) files. The output is to disk (or tape) as a filename. You will be able to see the process going on before your eyes. You will also see how short the string is compared to the DATA statements. There was one problem with the program in the book. Half of it - the string loading from DATA statements part - did not work! The revised program works. So here it is, with mods and stuff by yours truly. It is fairly heavily commented, so a lot of long explanation is not necessary.

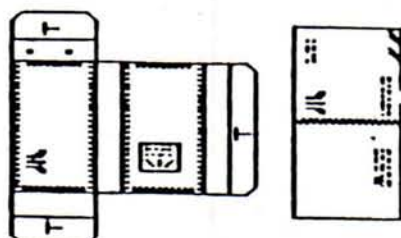
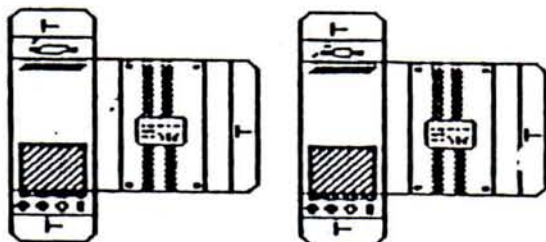
```
100 REM DATAPAK.BAS - A STRING PACKER *
105 REM FROM EVANS CH.3, PAGE 42 *
110 GOTO 260
120 REM * KEYBOARD ENTRY ROUTINE *
130 OPEN #3,4,0,"K:"
140 GET #3,RES:IF RES<68 OR RES>155 THEN 140
150 CLOSE #3:RETURN
160 REM * TIME DELAYS *
170 FOR Z=1 TO 500:NEXT Z:Z=0:RETURN
```

WACO's CHRISTMAS PRESENT FOR ALL

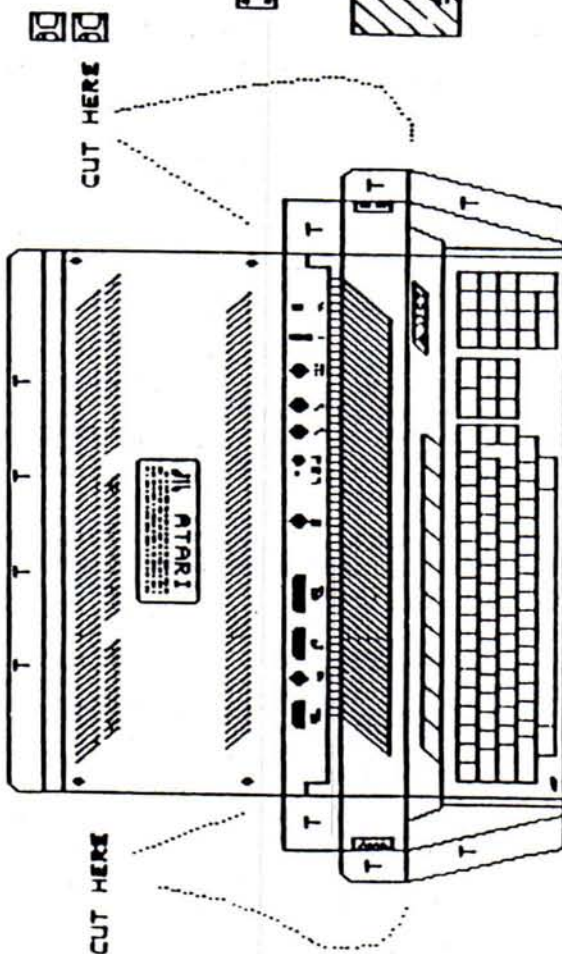
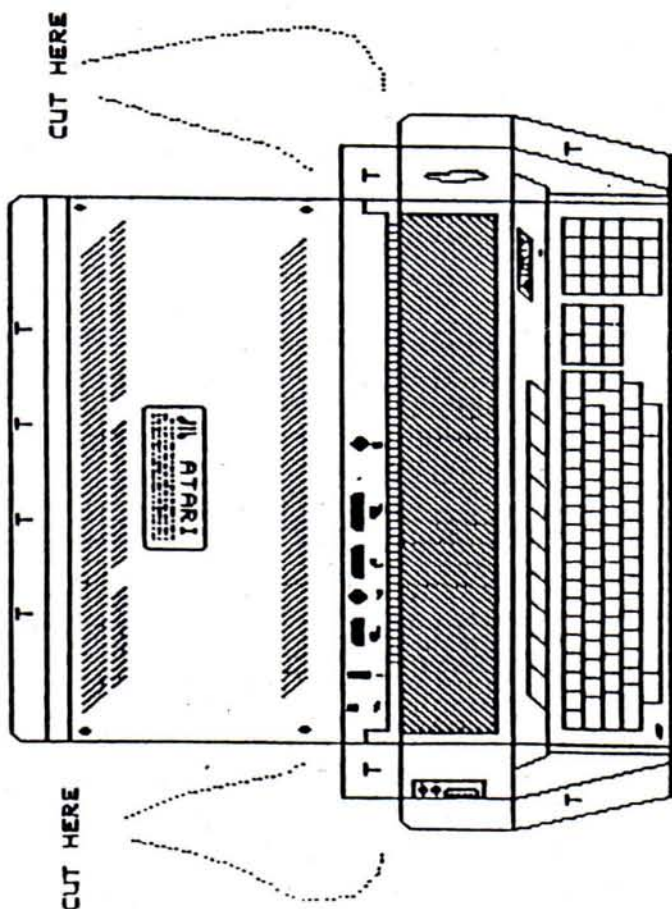
# The Mini ST

(Courtesy of Computah)

Now noone has to do without an ST.



A TINY ATARI ST  
SYSTEM FOR YOU TO  
CUT OUT AND GLUE  
TOGETHER...



PROGRAMMING PIPS (Continued)

```

1320 INPUT RESPONSE$
1330 FILE$(4,16)=RESPONSE$
1340 OPEN #2,4,0,FILE$
1350 GET #2,X:GET #2,X:GET #2,X:GET #2,Y
1360 MLSTART=X+256*Y
1370 GET #2,X:GET #2,Y
1380 MLEND=X+256*Y:N=MLEND-MLSTART+1
1390 GOTO 390
1400 OPEN #2,4,0,"C:"
1410 GOTO 1350
1420 PRINT CHR$(125):POSITION 14,2: "DATAPAK":? :? "STRING PACK
MACHINE LANGUAGE PROGRAMS"
1430 RETURN
1440 REM * START DATA AFTER THIS LINE *
1450 REM * NUMBER LINE FROM 2000 *
    
```

WACO's ST library now contains six disks of Macintosh public domain software for the Magic Mac, two disks of public domain games for PC Ditto, and two disks of 8-bit files (one Basic and one Binary) for the ST Transformer. WACO is "home for the emulators." Reader, 8-bit and ST library disks are only \$3 for current members.

Chairman: Th Darek, I always like some of the history project.

bill a.: You're including the source code for the Translator, and you said that further development depends in part on other programmers. Do you hope to include enhancements written by others in a future version?

DAREK: Yes. Perhaps if enough people join in, the idea of the multi-processor emulator might actually become reality. You have to understand that I wrote this for fun. I have a full time job at Microsoft Corp. (no boos please) and only have a few hours a day to work on it. I've tried to make the program modular (for other CPU's) and wrote about 50K of documentation for the ST log article. That will hopefully motivate some people to write modules for say, the VIC 20, Trash 80 Coco, PET, etc. There is a lot of software out for these machines, and it would be super if one machine (the ST) could run all that software. Sort of close the compatibility gap.

bill a.: Which did you prefer writing, the 800 emulator or the Apple version? And is <grin> the C=64 your next target?

DAREK: The actual Apple II routines (after the 6502 engine was working properly) took 2 weeks. The Atari 800 hardware routines took 4 months. So I'll have to say the Apple II was more fun. (It worked sooner!) By the way, to get the Apple II emulator running, I only had to do 2 (yes two!) hardware locations. The Atari one has close to a hundred hardware registers and memory locations it has to support, just to get the word READY on the screen. eeeeh.

bill a.: <grin>

MARK HOLMES: do you have a list of programs that will NOT work (PM/G, etc)?

DAREK: I don't have a list. George and Jim at WACO have done most of the actual testing of the product. I personally don't have an 8 bit computer to compare it against. They have produced a video tape showing software running. Like I said before, forget PM/G for now. The remaining software works pretty well, even the CES robot demo and Atari's Christmas tree demo. I am currently trying to get Fujiboink to run. I live a block down the street from Xanth Computers, and was a bit embarassed in their store when Fujiboink wouldn't run (the sound comes out perfectly though!). They send me programs that don't run, and I try to make them run. I've had pretty good success so far. Don't forget: most games are COPY PROTECTED. If you can't copy it over to the ST, it won't run!

bill a.: Darek, are modified display lists supported even though DLIs are not?

DAREK: Yes. Any display list you can create is supported. It is limited by the capabilities of the ST. The ST has a 200 scan line limit, so some very high screens get cut off on the bottom. Can't do much about that!

NOTES FROM THE WARDEN'S DESK BY KEVIN J BRADY, SYSOP

The purpose of this forum is to answer any questions about our bbs and telecommunications in general. Questions can be sent to: BBS QUESTIONS, 2120 DALTON ST, MCKEESPORT PA 15132. or sent to sysop feedback on the bbs.

At this time I would like to thank CARL RAINEY, JIM AND GEORGE ADAMSON, BUD BURNSIDE, ALL THE BETA TESTERS, AND CALLERS IN GENERAL.

By the time you read this the bbs will be online for one month, this will enable me to comment on user stats next issue and in future issues of this newsletter.

This will show the total calls, total numbers of users validated on the bbs.

Now on to another point, When you first call the bbs, you will be online as a visitor and have limited functions. But the next time you logon (read next day), you will be validated for the amount of 40 minutes per call, 1 time per day for non-members and 20 minutes per call, 2 times per day for paid up members of WACO.

Also you will have access to the upload/download section of the bbs.

When you browse the files, you will notice that some of the selections have not been filled or used. This is the result of trying to put more features in with only 512k of memory and 2 double sided drives, this bbs would benefit from a hard drive, as we intend to place the Waco library online..

The system would have a hard drive but I can't finance it by myself, we need your support. our club dues are only 12 dollars per year.

your dues include the club newsletter, more time on the bbs, club discounts/offers.

So send in your dues money to :

WACO MEMBERSHIP OFFER

C/O WACO BBS

2120 DALTON STREET

MCKEESPORT PA 15132

WE THANK YOU FOR YOUR SUPPORT !!!!

If you need help on the bbs just press ?

ATARI PRODUCTS COMPANIES PLEASE NOTE THIS OFFER:

Any company willing to donate ST equipment to the bbs will receive the following in trade.

1. FREE ADVERTISING IN THE WACO PRINTOUT  
EQUAL TO THE RETAIL VALUE OF THE PRODUCT
2. MENTION OF YOUR PRODUCT IN THIS FORUM  
AND ON THE BBS
3. REVIEW OF SAID PRODUCT & PRODUCT DEMONSTRATED  
AT A CLUB MEETING

MARK HOLMES: does the emulator restrict the memory to 48k, or can the ST use the free memory as well? you said something about 48k only.

DAREK: No. It is limited to the 52K of memory available. It is equivalent to an 800XL with the Translator disk loaded. You can't just slap on 800K of extra memory. However, you can use the entire free memory as a large disk, so you can get an 800K D: drive (and it is a LOT faster than the actual 810 drive).

Chairman: Darek, what is the biggest hurdle you see to add the player missile graphics?

DAREK: The PM/G routines are already in the code. They are pretty fast BUT, and the big BUT, the hard part is not drawing them, it is erasing them quickly. This required buffering screen memory, etc. and as you know, the ST has 32K of screen memory. This makes PM/G quite slow to erase, so the code is never called. But the code is there for anyone to think over.

